Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

Sheet No 3105

LOCALITY:

Wrangell Narrows
Frederick Sound to
Tonka Wharf

CHIEF OF PARTY:

R. B. Erickson
Descriptive Report
to accompany
Plane Table Sheet "C"  N.o. 3105.
Wrangell Straits,
Alaska.
1910.
scale 1:10000
R. B. Derickson, Asst., Comdg.  F. E. T. Siems, Assistant,
Chief of Party.  Topographer.
General Description of the Shore.

As stated on the title sheet, the topography extends from Frederick Sound, at the entrance of Wrangell Straits to Tonka Cannery; therefore any general description given in this report will refer to this part of the Straits.

The country in this vicinity is low in most places, as the sheet shows. The mountains are scattered, and without foot-hills, forming the large areas of level tundra country between them. One or two hills, 500 feet high, lie west of the large dry inlet shown on the sheet, these may be considered as foot-hills to the mountains northwest of them. Other than these, however, any considerable elevation forms part of one of the mountains themselves.

Thus we find the whole of the northern part of Mitkof Island quite level, making it possible to see the ridge south of it, and the mountain at Mountain Point, on entering the Straits from the north.

The mountain opposite Petersburg can be seen at most places in the Straits. It is composed of three almost bare and broken peaks, close together and about the same elevation. Lower down, in places the mountain is covered with a very bright green moss.

The country is densely timbered in all places, except
where it is cleared, as in Petersburg and on the top of the last mentioned mountain. Particular care was taken to get a good determination of the timber line for possible use in navigation as ranges and tangents of points.

In places, along the shore between high water line and the timber line salt water grass grows to an average width of 15 meters. At Mountain Point the tree-line and high water line are practically identical, likewise the eastern shore from about one and a half miles north of Blunt Point.

Considerable beach is exposed at low water where the streams have brought down the sediment, forming the flats. Boulders fringe along the greater part of the entire beach; they are particularly numerous north of Prolewy Rock, northeast of the White Beacon opposite Petersburg, along both sides of the Straits where they contract, and the shore north of Petersburg. These boulders range in size from one to six feet in diameter.

A rocky ledge extends beyond the general low water line from the shore opposite Petersburg, and is marked by a white beacon. Prolewy Rock dries at low water and is marked by a red lighted beacon. It forms part of the rocky ledge, which extends from the near point.

The large inlet on the west side is dry at low water likewise the passage behind the island in the north entrance to the Straits, as shown on the sheet.

The general trend of the shore line is quite regular, broken in few places by small bays.
Inshore Dangers, Bars, and Shoals.

The two inshore dangers marked by beacon and light are the rocky ledges opposite Petersburg, and Prolewy Rock on the west side at the entrance of the Straits.

The hydrographic survey will show the extent of bars and shoals at the entrance of the Straits and off Bayou Point, also the extent of boulder ledges, along the shore north of Petersburg, north of Prolewy Rock, and along the shores where the Straits contract.

The low water line of the flats north of Mountain Point and south of Bayou Point on the west side have been determined by sextant angle positions at low water.

Watering Places.

Water can be obtained at Scow Bay, Petersburg, and Tonka; in each case it is piped down to the wharf. The best water especially for drinking purposes is to be had at Scow Bay, however, the pipe line is in poor condition at the present time, allowing only a small flow of water. Tonka has also good water. The water at Petersburg is piped from a stream, which flows through the low tundra country in back of the town. It is strained by vegetable matter, and is not considered good water especially for drinking purposes.

Light Buoys and Beacons.

The entrance to the Straits is marked by white light on the north point of Mitkof Island on the east side, and by
red light on Prelew Rock on the west side of the Straits. A narrow five fathom channel lies near the kelp bordering along the point last mentioned, and is unmarked. The rocky ledge opposite Petersburg is marked by a white beacon.

The location and explanation of the several buoys and dolphin especially those of recent establishment, will be given in hydrographic report.

Ports.

Petersburg is an incorporated town of some 250 people. It has several industries, — cannery, sawmill, and shipment of halibut. A large percentage of the people are engaged in fishing. The town has three or four stores, at the general store, hardware supplies and provisions can be had. There are three wharves; cannery, sawmill, and steamship. Several floats for small boats lie over the flat between the steamship and sawmill wharves. A large float lies inside along the steamship wharf. The U.S. Wireless Station is in operation with Wrangell every hour.

The Cannery at Tonka is still disused.

Scow Bay is the name given to a small settlement, south of Blunt Point. Scows are anchored in the bay from which a large amount of halibut is shipped during the winter. There is a wharf here belonging to a person engaged in fishing. He has a store in the building on the wharf.

Methods of Survey.

The topographic survey was made after the triangulation
points were computed and plotted. The Army Engineers stations were all recovered except Nos. 17 and 18. Signals for hydrographic use were built in their places, namely 17' and 18' and determined by plane-table.

The Army Engineers stations were designated by black circles, to distinguish them from the Coast Survey triangulation points.

All data on topographic sheet was determined by stadia and rod in the usual way, except the flats north of Mountain Point, and south of Bayou Point on the west side, which were determined by sextant angles.

Three magnetic meridians were determined as shown on the sheet. The angles given on the sheet are the magnetic declinations as measured.

The scale of the sheet is 1:10000. Contours are shown for every 50 feet. The height of the mountains as marked on the sheet express the elevations at the ground.

Respectfully submitted,

[Signature]
Assistant,
Topographer.

Approved,

[Signature]
Asst., C.& G.Survey.
Commanding U.S.S. "Gedney"
### PLANE-TABLE POSITIONS

<table>
<thead>
<tr>
<th>Object</th>
<th>Lat.</th>
<th>D.M.</th>
<th>Long.</th>
<th>D.P.</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>&quot;A&quot;</td>
<td>56° 47′</td>
<td>234</td>
<td>132° 53′</td>
<td>734</td>
<td>Used for Hydro.</td>
</tr>
<tr>
<td>17′</td>
<td>56° 46′</td>
<td>1609</td>
<td>132° 58′</td>
<td>610</td>
<td>&quot;</td>
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<tr>
<td>18′</td>
<td>56° 45′</td>
<td>1713</td>
<td>132° 59′</td>
<td>20</td>
<td>&quot;</td>
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<tr>
<td>Beacon, white</td>
<td>56° 48′</td>
<td>1691</td>
<td>132° 58′</td>
<td>116</td>
<td>Opposite Petersburg.</td>
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<tr>
<td>Light, F.R.</td>
<td>56° 49′</td>
<td>797</td>
<td>132° 56′</td>
<td>705</td>
<td>On Prolewy Rk.</td>
</tr>
<tr>
<td>Light F.W.</td>
<td>56° 49′</td>
<td>491</td>
<td>132° 55′</td>
<td>341</td>
<td>N.Pt.Mitkof Id.</td>
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<tr>
<td>Flag-Pole</td>
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<td>1217</td>
<td>132° 59′</td>
<td>312</td>
<td>Pt.W.ofBayou Pt.</td>
</tr>
<tr>
<td>Wireless Pole</td>
<td>56° 48′</td>
<td>1329</td>
<td>132° 57′</td>
<td>96</td>
<td>At Petersburg.</td>
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